

CLAIMS

1. A metal belt, characterized in that the metal belt is made of a nickel-iron alloy manufactured by an electroforming process and that
5 when the iron content of the nickel-iron alloy is denoted by F (mass %) and the sulfur content thereof is denoted by S (mass %), the nickel-iron alloy satisfies relationships expressed by the following equations:

10 $0.001 \leq S \leq 0.13$ (1)

$$85 \times S + 3 \leq F \leq 350 \times S + 3 \quad (2)$$

2. The metal belt according to claim 1, characterized in that the sulfur content S (mass %) is $0.02 \leq S \leq 0.09$.

15 3. The metal belt according to claim 1, characterized in that the nickel-iron alloy contains carbon and that the carbon content (mass %) is 0.07 to 2 times the sulfur content (mass %).

4. A fixing belt having a metal layer,
20 characterized in that the metal layer is made of a nickel-iron alloy manufactured by an electroforming process, and that when the iron content of the nickel-iron alloy is denoted by F (mass %) and the sulfur content thereof is denoted by S (mass %), the
25 nickel-iron alloy satisfies relationships expressed by the following equations:

$$0.001 \leq S \leq 0.13 \quad (1)$$

$$85 \times S + 3 \leq F \leq 350 \times S + 3 \quad (2)$$

5. The fixing belt according to claim 4, characterized in that the sulfur content S (mass %) is $0.02 \leq S \leq 0.09$.

5 6. The fixing belt according to claim 4, characterized in that the nickel-iron alloy contains carbon and that the carbon content (mass %) is 0.07 to 2 times the sulfur content (mass %).

7. The fixing belt according to claim 4,
10 characterized in that the fixing belt has a metal layer and a release layer.

8. The fixing belt according to claim 7, characterized in that the fixing belt has an elastic layer between the metal layer and the release layer.

15 9. The fixing belt according to claim 8, characterized in that the elastic layer is formed from silicone rubber, fluororubber and fluorosilicone rubber.

10. A heat fixing device, characterized in
20 that the heat fixing device has a fixing belt and a pair of pressure contact members which are in pressure contact with each other via the fixing belt, that an inner surface of the fixing belt slides with one of the pair of pressure contact members, that an
25 image is fixed on a recording material by heat from the fixing belt, and that the fixing belt is the fixing belt according to any one of the claims 4 to

9.

11. The heat fixing device according to claim
10, characterized in that the heat from the fixing
belt is heat generated in the metal layer of the
5 fixing belt by a magnetic flux generated from
magnetic flux generating means.

12. The heat fixing device according to claim
10, characterized in that the heat from the fixing
belt is heat generated in a heating body which is
10 provided in the pressure contact member which slides
with the belt.